

Amendments to Specification

Please replace paragraph [0008] with the following amended paragraph:

[0008] More specifically the joining operation includes staking the first component to the second component with a self-piercing rivet or the like. A shank of the rivet or other staking connector is driven through the first component into the wall of the second component. Preferably, the shank of the rivet is a hollow cylinder with a tapered, sharpened end for penetrating the thickness of the first component and the wall of the second component. A head of the rivet is driven against the outer surface of the first component and the shank of the rivet penetrates well into the wall of the second component, or even through it. But since the second component may be an elongated hollow body, there ~~is~~ may be no access to the buried end of the rivet shank to form it over against the inside of the wall of the second component to secure a riveted joint. In accordance with the invention, the rivet is permanently secured in the first component and second component by passing an electrical current through the rivet and second component to fuse the rivet to at least the surrounding second component material.

Please replace paragraph [0024] with the following amended paragraph:

[0024] For the riveting step, cylinder 44 is sized to accommodate the round head 14 of rivet 10. Welding electrode 42, with a flat tip for hammering, is sized to the diameter of rivet head 14 and can slide axially up and down in cylinder 44. Cylinder 44 helps to locate rivet 10 on the joining portion of first component 30 and to keep it aligned as it is being driven into surface 34. It also provides suitable clamping force on the assembled parts for the joining operation. Also, copper slab ~~welding electrode~~ 40 is shaped to fit closely against wall 33 to hold second component 32 against first component 30 and for good electrical contact with wall 33. Copper slab 40 acts as an electrode, a counter electrode for welding electrode 42.

Please replace paragraph 0026 with the following amended paragraph:

[0026] The riveted, mechanical attachment is secured using a resistance spot welding process. In this welding process, rivet 10 receives a pulse of high current flow from welding electrode 42 and copper slab 40, which acts as a counter electrode. The current flow may be applied anytime before or after the above-described riveting operation is completed, or even started. This pre-application of current flow tends to soften the workpiece components, thereby facilitating the puncture of the rivet 10 therethrough. Preferably, however, the current flow is applied just prior to contact between the rivet 10 and the second component 32. A steady application of force is supplied by ~~clamping element~~ cylinder 44 and copper slab 40, and a pulse of high amperage AC (or rectified AC) current is directed through the facing electrodes 40, 42 to the joining location. Typically a 60 Hertz welding current is applied for several cycles of electrical current application, which amounts to less than a second of applied electrical current. Resistance to the electrical current by rivet 10 and second component 32 generates heat in the flow path of the current, thereby causing the metal located at the joining location to melt as well as a substantial portion of shank 12 of rivet 10.